

Appendix 1 – Full specification for printed postage impression and barcodes

Introduction

The designs in this specification are to be used with the new unsorted Account product. Artwork for the new Account product can be obtained at www.royalmail.com/artwork.

Purpose

The document specifies requirements for the designs. They feature a Royal Mail Branding Mark surrounded by a border, with text and a code content to the left of the Mark.

Each design includes the following elements:-

- Account Postage Text
- Account Number
- Service Indicator
- Mailmark 4-State Barcode
- Royal Mail Branding Mark in English or Bi-Lingual Welsh / English surrounded by a border

Scope

- 1st & 2nd Class designs are required together with Bi-Lingual Welsh / English variants.
- Potential issues with the printing of the design on envelopes have not been considered within this document.
- The designs will be printed onto the mailpiece either by customers or by their suppliers. The current option to apply the indicia using a Handstamp will no longer be permitted.
- Scaling of the designs is not permitted.
- The minimum mail size for use with these designs is C6 (162mm long x 114mm high)

Indicia Location

The Indicia designs (and their associated clear zones) must be wholly positioned in the top right corner of the mailpiece in an area 75mm long and 40mm high.

A minimum clear zone of 5mm is required around the indicia design on all sides.

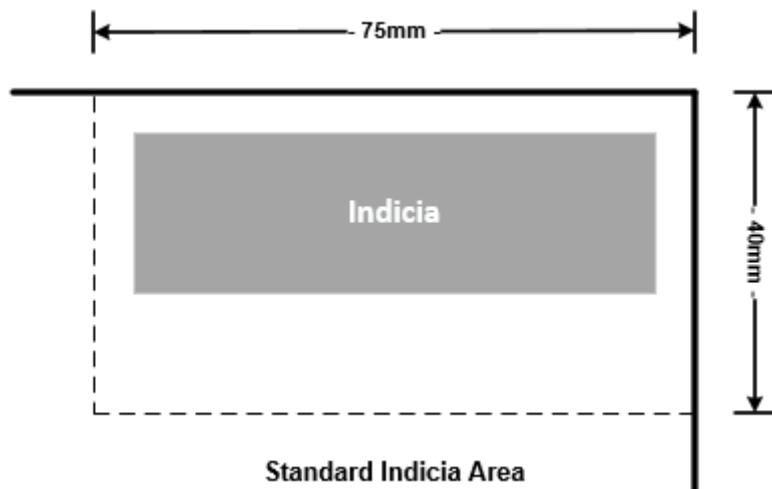


Figure 1 - Indicia Area (Not to Scale)

Indicia Design

The design consists of the Royal Mail Branding Mark which is surrounded by a border and positioned to the right of text and a 4-State Barcode. English and Bi-Lingual Welsh / English design variants are provided as illustrated in Figure 2 - Figure 3. The dimensions for the designs are provided below, and the details of the content are provided in section 0 and illustrations are provided in section 0.

	English PPI with 4-State Barcode	Bi-Lingual Welsh / English PPI with 4-State Barcode
Overall Dimensions	64mm long x 18mm high	62mm long x 21mm high
Text & Code Area Dimensions	40mm long x 18mm high	40mm long x 21mm high
Branding Dimensions	17mm long x 18mm high	17mm long x 21mm high

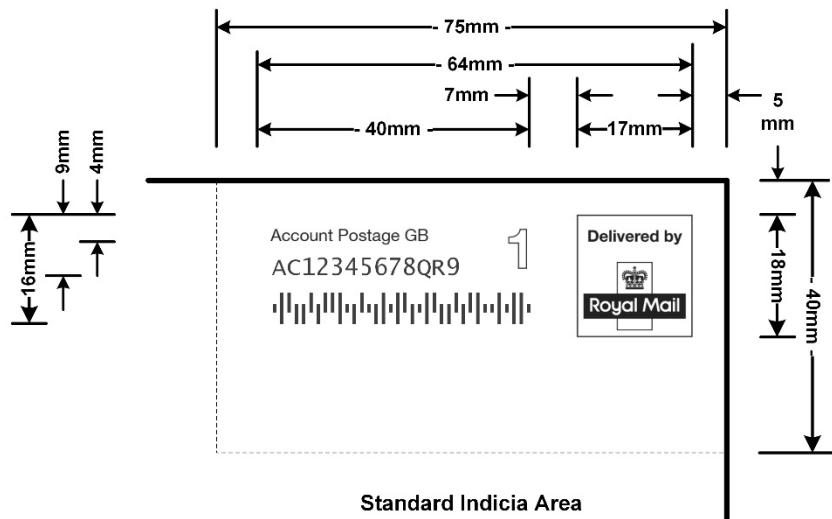


Figure 2 – 1st Class English (Not to scale)

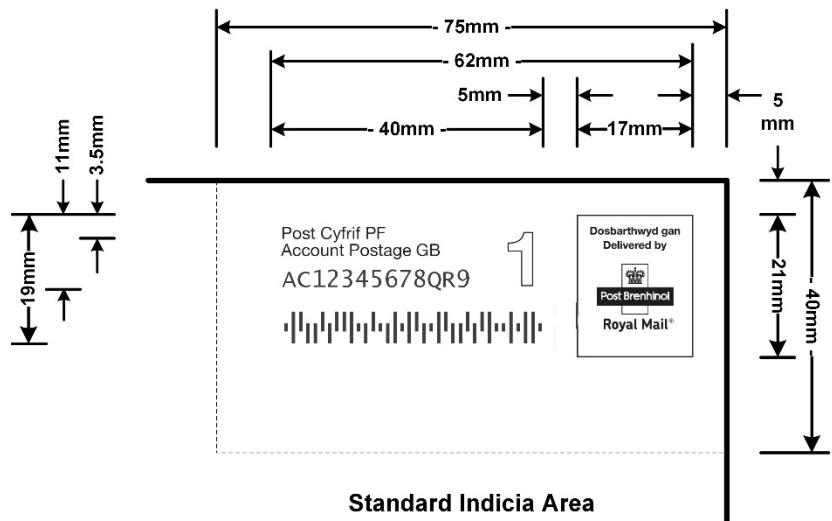


Figure 3 – 1st Class Bi-lingual Welsh / English (Not to scale)

Content Definition

The Text & Code Area content is defined in the table below:-

Component	Text & Code Area
'Account Postage' Text	<p>The Account Postage text is printed in the top left corner of the Text & Code Area as follows :-</p> <ul style="list-style-type: none">• 'Account Postage GB' is printed on English designs.• 'Account Postage GB' and 'Post Cyfrif PF' on the Bi-Lingual Welsh / English designs; the 'Post Cyfrif PF' text being printed above the 'Account Postage GB' text.• It is printed in title case using 7pt Helvetica font.• It is printed 2mm from the left edge of the Text & Code Area. 'Account Postage GB' is printed 4mm from the top of the Text & Code Area in the English design, and 'Post Cyfrif PF' is printed 3.5mm from the top of the Text & Code Area in the Bi-Lingual Welsh / English design.
Account Number Text	<p>The Account number is printed beneath the Account postage text as follows :-</p> <ul style="list-style-type: none">• It is prefixed by 'AC' and includes 8 numerals, 2 alpha numerics, and a single character checksum suffix ¹ as defined in section 0. Where the Account Number has less than 10 characters, preceding zero's must be added.• It is printed using 10pt Lucida Console upper case font. A clear zone of 1.3mm ² is provided around the Account Number as illustrated in Figure 4.Error! Reference source not found.• It is printed 2mm from the left edge of the Text & Code Area, and is printed 9mm from the top of the Text & Code Area in the English design, and 11mm from the top of the Text & Code Area in the Bi-Lingual Welsh / English design.

¹ The suffix provides a checksum. It enables a level of error detection and correction to be performed on the account number.

² This equates to a minimum field size of 30.1mm x 5.8mm.

Component	Text & Code Area
Service Indicator - English	<p>A numeric service indicator is required as follows :-</p> <ul style="list-style-type: none"> • 1 or 2 only • It is printed using a Helvetica outline font and is 6mm high. The font outline thickness is as follows :- <ul style="list-style-type: none"> ◦ 1st Class Design – 0.402pt ◦ 2nd Class Design – 0.41pt • It is printed 1.5-2mm from the top of the Text & Code Area and is right justified.
Service Indicator - Welsh / English Bi-lingual	<p>A numeric service indicator is required as follows :-</p> <ul style="list-style-type: none"> • 1 or 2 only • It is printed using a Helvetica outline font and is 8mm high. The font outline thickness is as follows :- <ul style="list-style-type: none"> ◦ 1st Class Design - 0.45pt ◦ 2nd Class Design – 0.45pt • It is printed 2.5mm from the top of the Text & Code Area and is 1mm right from the right of the Text & Code Area.
4-State Barcode	<ul style="list-style-type: none"> • The Mailmark Barcode D is positioned in the bottom left corner of the Text & Code Area as follows. The requirements for the barcode are provided in at a pitch of 24 bars per 25.4mm. • The bars must be printed in a field that is 38.1mm long and 4.6mm high. • A clear zone of 2mm is required on all four sides around the Barcode. • The Barcode has 36 bars and is printed in a barcode field size of 42.1mm x 8.6mm.) • It is printed 2mm from the left and bottom of the Text & Code Area.

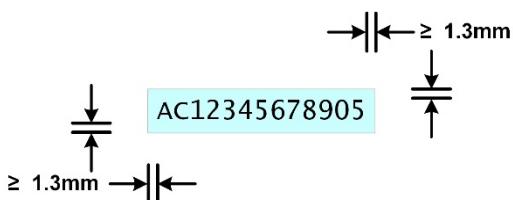


Figure 4 – Account Number Clear Zone (Not to scale)

The Branding content is defined in the table below:-

Design	Branding
English	<ul style="list-style-type: none">• The English Branding consists of 'Delivered by' text printed above an English Royal Mail cruciform.• The border that surrounds Branding is 0.5pt wide.• The 'Delivered by' text is printed in title case using Helvetica 6.75pt bold font. It is printed 2mm below the top border and is centre justified.• The Royal Mail cruciform is 10mm high and is inset by 1mm from the left bottom, and right borders.
Welsh / English Bi-lingual	<ul style="list-style-type: none">• The Bi-Lingual Welsh / English Branding consists of 'Dosbarthwyd gan' text followed by 'Delivered by' text on a second line above a Welsh Royal Mail cruciform.• The border that surrounds Branding Area is 0.5pt wide.• 'Dosbarthwyd gan' text is printed above 'Delivered by' text. Both are printed in title case using Helvetica 4.5pt bold font. 'Dosbarthwyd gan' is printed 1.5mm below the top border and is centre justified.• The Welsh Royal Mail cruciform and 'Royal Mail' text is 10mm high and is inset by 3mm from the left bottom, and right borders.

Account Number Format

The Account Number is defined as follows:

AC<Digit><Digit><Digit><Digit><Digit><Digit><Digit><AlphaDigit><AlphaDigit><ChkSum>

e.g. AC12345678AZ8

The leading characters AC must be in upper case.

<Digit> contains characters in the range 0 to 9 inclusive

<AlphaDigit> contains characters in the range 0 to 9 inclusive and A to Z (upper case only inclusive)

<ChkSum> contains characters in the range 0 to 9 inclusive and is calculated as follows:

Modulo 10 sum of the elements

<Digit><Digit><Digit><Digit><Digit><Digit><Digit><AlphaDigit><AlphaDigit> from the account number defined above. i.e. all elements **except** the AC and <ChkSum>.

<Digit> shall have the values defined by the characters

<AlphaDigit> for the numeric characters shall have the values defined by the characters and for the Alpha characters shall have values assigned as follows:

Character	Value
A	10
B	11
:	:
Z	35

Example checksum calculation

For example an account number without a checksum of: AC12345678AZ, would have the following value:

$$1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 10 + 35 = 81$$

This would generate a checksum of: 1 (as the final number in the sum is assigned as the checksum.)

Giving a final printed account number of: AC12345678AZ1

Indicia Illustrations



Figure 5 – 1st Class English (Not to scale)



Figure 6 – 2nd Class English (Not to scale)



Figure 7 – 1st Class Bi-Lingual Welsh / English (Not to scale)



Figure 8 – 2nd Class Bi-Lingual Welsh / English (Not to scale)

4-State Barcode Requirements

The 4-State barcode is a Mailmark 4-State Barcode D that uses the bar symbology and dimensional standards of a Customer Barcode (also known as a CBC and Barcode) with a defined data content applicable to its type. The data is encoded to produce a barcode that includes bars in 4 possible states - “D” = Descender bar, “A” = Ascender bar, “F” = Full bar, “T” = Track bar (DAFT).

The codes must be printed in black on a lighter (contrasting) background. Details of the code content is provided in the EIB Barcode Specification v4-3 Final 20161220, and printing requirements for the code are provided in section 0.

Design Ref.	Code Content				
	Info Type (1)	Version (1)	Format (1)	Class (1)	Licence No. (6)
4E1	3	1	0	1	UBRALU
4E2	3	1	0	2	UBRALU
4W1	3	1	0	1	UBRALX
4W2	3	1	0	2	UBRALX

Printing Requirements

The printing requirements are aligned to the requirements for Mailmark 4-State Codes. The key requirements are provided in the following extract.

Printing Reqs.	
Location	<ul style="list-style-type: none">The Indicia must be wholly positioned in the top right corner of the mailpiece and be 5mm ± 2mm from the top edge and 5mm ± 2mm from the right edge as illustrated in Figure 9.
Indicia & Substrate Colour	<ul style="list-style-type: none">The Indicia must be printed in black on a lighter (contrasting) background subject to the contrast ratio requirements below.The design must not be printed as a negative.The print quality shall be consistent throughout the indicia.The edges of the barcode must be sharp and clearly defined.No other text, patterning, or graphics shall be printed in the indicia area and its clear zone.
Print Quality	<ul style="list-style-type: none">The Indicia must be printed at a minimum resolution of 300dpiIndicia including 4-State barcodes must achieve a minimum Print Contrast Ratio of 40%, and a minimum Reflective Difference of 30%.
Skew	<ul style="list-style-type: none">The maximum skew for the whole Indicia is 5° from the horizontal axis.

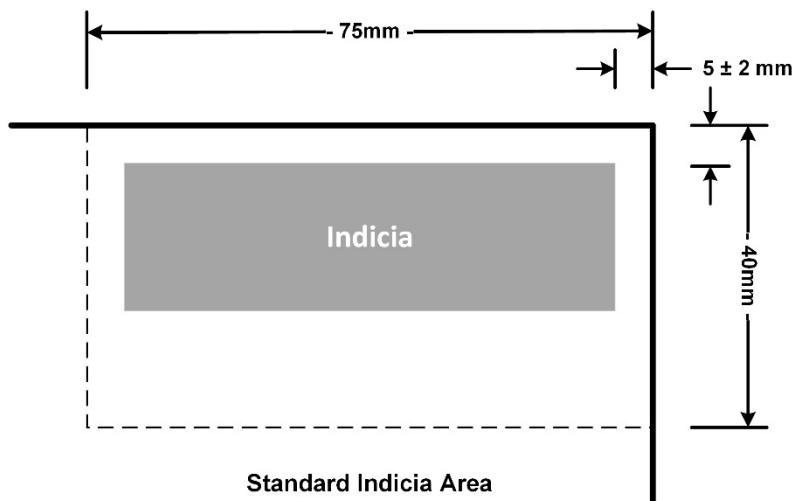


Figure 9 - Indicia Print Area (Not to Scale)